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MEETING ABSTRACT

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# Psychological status and breath at children with psychosomatic pathology

Oleg Grishin, Ekaterina Paramoshkina\*, Varvara Leshinskaya

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## Background

Breath and emotions are closely connected and that is reflected in various symptomatology in children with psychosomatic pathology. The aim of study was to estimate the psychosomatic status and ventilation function of breath using of respiratory biofeedback in children with various psychosomatic diseases.

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## Materials and methods

To examine the relationship between respiration and psychological status in children with psychosomatic disorders, 20 children aged 8-12 were studied during the integrated treatment using respiratory BFB by capnography at day-care hospital. Rates of respiratory function, anxiety level and frustration reactivity were measured.

## Results

The significant decreases of anxiety level, combined with an increase in frustration tolerance, were found. Moreover, these processes were accompanied by an increase in CO<sub>2</sub> at the end of exhalation (FetCO<sub>2</sub>) and the structure changes of breathing pattern. An internal restructuring of the respiratory cycle was observed: expiration time increased while the respiration rate remained unchanged.

## Conclusions

Whereas hyperventilation syndrome diagnosis in children should be focused mainly on FetCO<sub>2</sub> and respiration rate indices, to identify other forms of functional respiratory disorders it is necessary to control the respiratory cycle data, among them the exhalation duration particularly.

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Laboratory for respiratory physiology, Research Institute of Physiology SB  
RAMS, Novosibirsk, Russia



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